

Patent Application of Raymond E. Vache for "Improved Foundation Repair Bracket"
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The latch bar maintains a parallel orientation between the sleeve 14 and the flanges 15L and 15R.

Vertical clearance is provided between the retainer plates 18A and 18B and rectangular holes 31 and 32 to allow the latch bar 23 to pass over the pin 35. The flanges 15L and 15R are then translated vertically to align the latch bar concave surface 37 with the cylindrical pin 35. At this point, the clearance holes 25R and 25L of the channel-shaped spacer align with the clearance holes 27 and 26 of the flanges 15L and 15R respectively. The threaded screw 21 is inserted in the aligned holes and the nut 22 installed.

The shouldered pin 20 is then installed which fully constrains the flanges to the sleeve 14, channel-shaped spacer 17 and cantilever beam 16.

A clearance of approximately 1/32 of an inch is provided between the latch bar concave surface 37 and the cylindrical pin 35 to allow the bar to traverse downwardly over the pin. The latch bar urges against the cylindrical pin when the hydraulic system 11 lifts the bracket assembly 10 and the flanges 15L and 15R deflect about the screw 21 and nut 22.

After the foundation 13 is leveled and the bracket assembly 10 is secured to the piling 12, the shouldered pin 20, threaded screw 21 and nut 22 are removed. The left flange 15L is lifted vertically to disengage the latch bar 23 from the pin 35. Both flanges 15L and 15R are then removed for future use.

ABSTRACT

A bracket assembly used for raising and supporting the foundation or slab of a building. The assembly includes a cylindrical sleeve, lifting beam, spacer and two removable flanges to which a hydraulic or screw lifting system is attached. The assembly is used where the lifting bracket is installed under a foundation and a piling inserted through the sleeve and force into the ground by the lifting system attached to the top of the piling. Cost saving is realized since the flanges are removed after the building has been leveled and reused at subsequent jobs.